

ABSTRACT OF THE DISCLOSURE

Embodiments of a device and a technique are disclosed for locating the angular position of a radiating point source with respect to a detector comprising a point source of radiation, a variable transmissivity mask with pseudo-random variations, a multi-element detector and computing means for interpreting the detected image. The mask pattern, when illuminated by a point source of radiation, casts an image on the detector array. Computing means determine the pattern shift to allow determination of point source angular location in two dimensions. The mask transmissivity pattern and corresponding image vary in two dimensions, in such a manner as to yield two correlation peaks that indicate the incident angle in two dimensions. The differential shift and common mode shift in correlation peaks indicate the respective angles of incidence, allowing determination of the angular position of the light source.